

****DELIBERATIVE****

Ameren Labadie 1-Hour SO₂ Designation Talking Points (6/30/16)

Summary: This unclassifiable designation is based on an analysis of all modeling received from the state of Missouri, Ameren, and the Sierra Club. As outlined in the EPA's SO₂ NAAQS Designations Modeling Technical Assistance Document, the EPA supports the use of modeling as a surrogate to ambient monitoring to characterize air quality for the designations process, and the EPA recommends modeling the most recent 3 years of actual emissions. These data will generally best represent the emissions that would cause the impacts monitored in a 3-year monitoring data set 26 under most circumstances. Consistent with this approach, the EPA has determined that it is appropriate to consider 2013-2015 modeling analyses, and that we should no longer rely upon modeled violations from the 2012-2014 period as the basis for issuing a final nonattainment designation for the area. Based on this new, 2013-2015 modeling, the EPA's view is that the modeling results widely vary and greatly depend upon how the modeling was conducted, as discussed in this Technical Support Document. Because of the issues present in the modeling methodologies, the EPA does not have a clear basis to determine whether the area currently meets or does not meet the 2010 SO₂ NAAQS based on all currently available information and therefore is designating the area as unclassifiable for the 2010 SO₂ NAAQS.

- The EPA received numerous modeling analyses, including analyses from the state of Missouri, the Sierra Club, and Ameren, to assist us in making the final designation but all analyses were not representative of actual operating conditions and therefore were insufficient to enable EPA to determine whether the area meets or does not meet the 1-hour SO₂ NAAQS. Specifically:
 - The state of Missouri used a fixed stack exit velocity that does not appear to be representative of the actual, historical exit velocities.
 - Ameren's modeling analyses that used 2013-2015 emission data contained an error in the surface characteristic calculations.
 - The Sierra Club's modeling contained an error in the merged plume exit velocity calculations for units 3 and 4.
- EPA considered the recent monitoring conducted by Ameren but could not determine whether the area was or was not meeting the NAAQS based on this monitoring since the monitor has not collected data for at least a three year period.
- EPA considered the historic monitoring at the Valley and Northwest sites that was conducted in the late 1980's and early 1990's. EPA could not determine whether the area meets or does not meet the NAAQS based on this monitoring information since the time period of the monitoring was approximately 20 years ago.
 - Ameren asserts that data from the historic monitors support an attainment designation since the monitors either showed compliance with the standard or were just above the

standard and the emissions (on a ton per year basis) have dramatically decreased since that period.

- However, EPA evaluated the historic monitoring and determined that, although the ton per year emissions have decreased since that time period, the average hourly emission rates are still at a level that could result in a monitored value greater than 75 ppb. Even so, EPA does not have sufficient information to determine whether the area is currently meeting the NAAQS based on the historical monitoring data.